

**ATTACHMENT B**  
**PROCEDURES TO PREVENT HAZARDS**

**B.001**

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**SECTION B-I**  
**PROCEDURES TO PREVENT HAZARDS**

## **SECTION B-1 - PROCEDURES TO PREVENT HAZARDS**

### **B-1.1 SECURITY**

#### **B-1.1.1 General Description**

The Niagara Plant operates on a 24 hour basis, 7 days a week and has its own trained security force. This guard force, together with auxiliary equipment, insures 24 hour surveillance seven (7) days a week.

#### **B-1.1.2 24 Hour Surveillance System**

During business hours, access is controlled through ten (10) authorized points of entry, including four (4) gates directly monitored by guards. Two (2) building entrances are attended by receptionists, and one (1) building entrance is controlled by card access. Three (3) gates are electronically controlled from the main gate.

During off-hours, access is controlled through two (2) authorized points of entry directly monitored by guards. One (1) security guard patrols the entire plant during off-hours. In addition, ingress/egress is permitted for authorized company business purposes through designated gates on request and in the presence of a guard. Other regular entrances remain locked. ADT Alarms installed throughout the plant are monitored at the main gate.

#### **B-1.1.3 Barriers**

The entire plant, including the hazardous waste areas, is secured by a seven (7) foot chain-link fence with barbed wire on top. The extent of fences can be seen in drawing A-60338 (Attachment I).

#### **B-1.1.4 Means to Control Entry**

All employees are required to show an identification picture upon entering the property.

Visitors may enter company premises only during regular business hours. A record of each visitor is made and the following information obtained: name, company represented, business address, citizenship, person visited, purpose of visit, date and time of entry and departure.

When the main gate guard receives confirmation from the person to be visited, the guard will register the visitor and issue the following: all safety equipment, (mask, glasses, hard hat). Visitors shall be escorted at all times by the person visited or his/her authorized representative.

As previously described, all non-company vehicular traffic through gates is monitored by the guard force. All such vehicular traffic must register with the gate of entry. Safety equipment is provided by the guard before the driver is allowed to enter. After business is conducted, the safety equipment is returned to the gate by the driver and driver is cleared to leave.

At the T-Area and U-Area North Storage Units, warning signs are placed at the entrance gates and on the hazardous waste storage buildings and rolloff storage pad. The signs contain the legend, or equivalent, "Danger - Unauthorized Personnel Keep Out" in English. The letters are at least two (2) inches high on a reflective background. Signs are inspected weekly for mounting and legibility. In addition to the warning signs, the following signs are affixed to the storage buildings near the entrance on four (4) sides and on each side of the rolloff storage pad:

#### Drum Storage Buildings

RCRA Drum Storage Building

Caution - Hazardous Waste

Danger - No Smoking

1. Always keep drums closed.
2. Waste code number and date on top and side of drum.
3. Keep drums clean.
4. Transfer leakers upon detection.
5. Drums must be on pallets.
6. Keep sump empty.
7. Mark empty drums "empty" with bottom facing up.
8. Inspect drums and pallets weekly.
9. Aisle space must be at least twenty-four (24) inches.

#### Bag Storage Buildings

RCRA Bag Storage Building

Caution - Hazardous Waste

Danger - No Smoking

1. Always keep bags closed.
2. No free liquids.
3. Waste code number and date on bag.
4. Keep bags clean.
5. Transfer spilled bags upon detection.
6. Keep sumps empty.
7. Inspect weekly.
8. Periphery aisle space at least thirty-six (36) inches as defined by the containment outline.

#### T-Area Rolloff Storage Pad

RCRA Container Storage Pad

Caution - Hazardous Waste

Danger - No Smoking

1. Always keep containers closed.
2. No free liquid.
3. Waste code number and date on both sides of container.
4. Keep containers clean.
5. Keep sump area empty.
6. Inspect containers weekly.
7. Aisle space must be at least twenty-four (24) inches.

#### **B-1.1.5 Other Relevant Guard Functions**

##### **a. Emergency Procedures**

Emergency Procedures have been established to enable an organized group to take fast, efficient action in any emergency situation in order to:

- Safeguard company employees and property
- Protect the general public and neighboring business and industry
- Permit normal operations to be resumed as quickly as possible.

Types of emergencies and required action by the guard force and other Occidental personnel are outlined below. A copy of the Emergency Plan has been issued to the Security Department.

(1). Level C: Controllable Condition:

Definition: Minor fire, mechanical problems or any disturbance of normal operations that affects only the immediate area in the plant.

Action: Generally handled by department personnel. No action normally required by the guard force. The guard on patrol in the area may participate by providing some form of emergency assistance, in which case it will be reported in the usual manner.

(2). Level B: Limited Emergency Condition:

Definition: A condition that could endanger life and property in a given process or plant area and which requires outside help for correction or control, but generally can be contained.

Action: The person discovering the emergency will immediately call the main gate via emergency Ext. 7333, or via plant radio, giving name, location, type of emergency and assistance required.

Main Gate Personnel:

- A. Call fire department if so instructed.
- B. Call personnel from department emergency list.
- C. Have ambulance standing by.

Patrolmen & Watchmen:

- A. Immediately return to posts when fire signal is sounded or radio notification is made.
- B. Other guards will help as needed in directing traffic and fire equipment on public streets.
- C. Emergency conditions will remain in effect until "all clear" is announced.

(3). Level A: Full Emergency Condition

Definition: Any condition deemed at the time uncontrollable that can endanger life and property in adjacent operating departments or areas as well as surrounding properties. Requires considerable outside help from many sources.

Action: A Level A condition will be determined by the shift foreman or highest ranking supervisor present. The lead person will call Ext. 7333, or use the plant radio system, and announce a major emergency and request that the Major Emergency Organization be activated. The person will give name, position and location. The message will be repeated.

Main Gate Personnel:

- A. Call fire and police departments by Dialing 911.
- B. Call key personnel in accordance with established procedures.
- C. Do not accept incoming calls except those received over the private line.
- D. Prevent the admittance of any vehicles except emergency equipment and company vehicles needed at the emergency. Some Plant Services trucks may be required to transport material and supplies.
- E. Admit only specifically authorized personnel into the plant.
- F. Follow all other established emergency procedures.

Patrolmen & Watchmen:

- A. Immediately report to posts.
- B. Prevent all uninvolved personnel and vehicles from entering the premises.
- C. Direct fire and other emergency equipment to the scene.
- D. Refer inquiries to the main gate.
- E. Keep telephones open.
- F. Follow all other established emergency procedures.



**Business Hours:**

It is of paramount importance during business hours to maintain close traffic and personnel control both in-plant and on public streets until road blocks are established.

b. Medical Assistance

The Niagara Plant has its own hospital staffed with a part-time doctor and full-time nurses. The guard force has EMT (Emergency Medical Technician) guards on each shift for proper medical coverage.

## **B-1.2 INSPECTION PLAN**

### **B-1.2.1 Introduction**

The inspection plan for the Occidental Chemical Corporation, Niagara Plant facility, was developed to detect and respond in a systematic and timely manner to potential equipment malfunctions, facility deterioration, operator errors, and waste discharges that might release hazardous waste constituents to the environment or threaten human health. Imminent problems are handled immediately. All other problems are put on a schedule to be corrected.

This plan is reviewed, and amended if necessary: 1) annually, 2) if there is a significant facility revision, 3) if a significant incident occurs and the condition causing the incident was not adequately detected and responded to, or 4) to comply with future requirements, changes, or additions to the regulations.

The capability of a facility such as the Niagara Plant to operate without incidents that potentially could be hazardous to the environment or threaten human health is influenced by its design, construction, operation, and maintenance, as well as by an inspection program during operation. The design and construction specifications and key operating conditions for the Niagara Plant Hazardous Waste Facilities are covered in the specific design sections of the Part 373 Permit application for the facility. Also presented are example plans and programs for housekeeping and safety operating inspections for all areas of the facility. In addition, the standard operating practice for each operating unit of the facility requires that the process operators and supervisors routinely walk through their operating areas to make visual observations.

Further, the facility has an active preventive maintenance program in which schedules have been established for the routine maintenance of stationary and mobile equipment requiring such attention. A key part of this program is the record keeping on equipment items and systems. These records cover such information as purchase date, manufacturer, specifications, test results, past maintenance and repair history, and required maintenance schedule. Although the above programs are not part of this inspection plan, they complement and supplement this plan to provide a comprehensive plant-wide protection program.

### **B-1.2.2 Inspection Organization and Responsibilities**

In order to assure that all the required inspections are made, the Environmental Control Department performs weekly inspections. The responsibility for initiating and implementing corrective action remains primarily with the waste generating area.

- a. The Area Waste Disposal Coordinator or the department designee is responsible for the following:
  - (1). Initiating and following up any remedial response actions required by the conditions found during any inspection.
  - (2). Insuring that the operating personnel and foreman in the area maintain the required daily operating and inspection data on each waste tank and storage pad to insure that they are operated according to design specifications.
  - (3). For inspections scheduled less frequently (i.e. yearly tank and residue trailer inspections), Environmental Control will issue timely notices of the impending inspections to the area production personnel so that the equipment can be inspected by maintenance or transportation and distribution personnel.
- b. The Maintenance Department is responsible for:
  - (1). Performing all inspections as requested.
  - (2). Insuring that all the requirements of the PM program for the area are performed at the time specified.
- c. The Production Supervisor or designee is responsible for making the required equipment available for inspection on a timely basis and for implementing corrective action when an operating problem is identified.
- d. The Incineration Supervisor, or Operations Engineer serves as Waste Disposal Coordinator for the incinerator area and performs all the inspection functions.

- e. The Environmental Control Solid Waste Engineer (or designee) is responsible for:
  - (1). Insuring that the weekly inspections are completed in a timely manner using the forms specified in this plan.
  - (2). Reviewing the written inspection reports and requested remedial work plans and requesting any additional corrective action that may be necessary.
  - (3). Assuring that corrective actions are taken by issuing reminders to the Waste Coordinators when a previously identified condition appears on the inspection report for the following time period.
  - (4). Maintaining the complete inspection record files for the three (3) year period as required by this plan.

#### **B-1.2.3 Inspection Schedules and Written Report Forms**

- a. Container Storage Areas

- (1). Weekly Inspection Report

The weekly inspection of the container storage areas is the responsibility of the Environmental Control Department. The weekly inspection report includes several forms which are used in documenting inspection findings. Examples of these forms are included in Appendix B-I. The information included on the forms is discussed below. Page 1 of the inspection report is the cover letter which accompanies the report identifying the area inspected and any major findings requiring further attention.

Page 2 of the report form lists the inspector's name, the date and time of the inspection and the area inspected. The remainder of this page is an inventory of each drum stored by waste code at that location. The amount of each waste stored and the condition of each container is assessed and reported. When problems are noted, the required corrective action is listed in the space provided. A copy of the report is transmitted to the Area Production Manager, who has overall responsibility for the area, to assure that the Waste Disposal Coordinator does follow-up and corrective action is taken. The positions listed are subject to change and the report

distribution will change accordingly.

Page 3 is a diagram of the drum locations on the pad so identified problems, if any, may be located easily.

Pages 4a, b, c, and d of the report are checklists of the important container storage area items that require weekly inspection. Items such as safety equipment checks and general pad conditions are reported here. Corrective action, when required, is also reported here. The inspector signs the bottom of this sheet certifying that the results reported are correct at the time of his inspection. The area inspected indicates which form is used.

Page 5 of the report is the report form for the inspection of the area residue storage tanks (if present in that particular area). This form is discussed in the next section on Tank Inspections.

Page 6 of the report is the report form for the inspection of the U-90 Drum Storage Warehouse ..

Page 7 of the report is the inspection report form for the T-28, Bag Storage Building . The buildings, leachate collection sumps, and bags along the periphery are inspected weekly. If a torn bag is noted, the bag will be cleaned and repaired or the contents will be transferred to another bag.

Page 8 of the report is the inspection report form for the T-Area Rolloff Storage Pad. The pad and containers are inspected weekly and any defective containers and corrective actions required are reported on this form.

Page 9 of the report is the inspection report form for the former radio tower property (now X-Area).

## (2). Daily Inspection

Daily inspection of the container storage areas is the responsibility of the Area Waste Disposal Coordinator or designee. Typical daily inspection forms are included in Appendix B-I. Drum pads are inspected for leaky drums, drums not on pallets, and drums not closed or bulging. The pad and sump surface are inspected for any sign of deterioration, or any

wet areas or erosion indicating leakage. If water is present a representative sample is taken before it can be pumped out.

b. Area Residue Storage Tanks

(1). Weekly Inspection

The weekly inspection of each generating area's waste storage tank is the responsibility of the Environmental Control Department. The inspection consists of checking the condition of the following equipment and facility items:

- Tanks
- Associated piping
- Transfer pumps
- Associated instrumentation
- Containment pad and dike wall
- Containment sump and trench
- Sump pump
- Tank closed-vent piping
- Tank emissions control device.

The inspection of the tank closed-vent piping and the emission control device are described in the Inspection and Monitoring Plan for Air Emissions from Tanks and Containers (Appendix B-VIII) .

The inspection findings are noted on the Residue Tank Weekly Inspection Report (Appendix B-I) and corrective action is identified when needed.

(2). Daily Inspection

As part of daily responsibilities, the Area Supervisor or designee visually inspects the general tank area once per day for obvious leaks, spills and signs of tampering. Findings are

recorded on the RCRA Hazardous Waste Storage Tank Daily Inspection Log Sheet included in Appendix B-I. At least once a day the operator verifies that each tank's overfill controls and waste feed cut-off systems, where provided, and monitoring equipment are operating properly. These inspections are noted in the daily process operating log book along with any corrective action taken.

(3). Non-Routine Inspections

The following inspections are performed on schedules developed from experience with the materials of construction and the characteristics of the wastes treated or stored.

- (i). Wall thickness measurement yearly.
- (ii). Internal inspection for cracks, corrosion, erosion and pitting are scheduled for every five (5) years. This interval between inspections may be increased based on data and experience gained in conducting the inspections.

The wall thickness measurement is performed by ultrasonic measurement. Glass lined tanks are spark tested. Internal inspection is performed using a fiber optic device from outside the vessel or by entering the tank when necessary. Procedures for emptying and flushing each tank are part of the operating manual and plan for each process. Minimum wall thickness is addressed in the design specifications for each tank (Attachment E).

The Niagara Plant SR4 covers the safety requirements, testing, and other considerations necessary for entering a tank for inspection. The Niagara Plant Safety Regulations are included in Appendix B-II.

c. Liquid Waste Incinerator Area

(1). Weekly Inspection

The weekly inspection of the Liquid Waste Incinerator is the responsibility of the Liquid Waste Incinerator Process Supervisor or designee. The inspection includes the Calgon wastewater treatment unit which is exempt from the Part 373 inspection regulations.

Occidental includes the unit in this inspection in an effort to maintain the most safe and environmentally sound operation throughout the Niagara Plant. An example of the Liquid Waste Incinerator Area and Calgon Unit Weekly Inspection Checklist form is included in Appendix B-I. A separate form is completed for each of the following equipment/facility items:

- Tanks
- Trailers
- Pumps
- Containment areas
- Filters
- Miscellaneous, feed piping, and scrubbing system
- Instrumentation
- Safety equipment and housekeeping
- Chemical waste storage tank vent system
- Corrective action.

The chemical waste storage tank vent system inspection includes monitoring the performance of the carbon adsorber control devices and visual inspection of the closed vent system as described in the Inspection and Monitoring Plan for Air Emissions from Tanks and Containers (Appendix B-VIII) .

A completed copy of the inspection checklist is sent to Environmental Control for inclusion in the RCRA files for the plant. The original copy is maintained in the incinerator operating log.

## (2). Daily Inspection

As part of daily job responsibilities, each operator is required to walk through the processing area at the beginning of the shift visually inspecting the equipment for leaks and spills (fugitive emissions) and signs of tampering. The operators also take hourly readings of pertinent operating parameters such as process temperature, pressure and flow rates, to assure that the equipment is operated within operating parameters. Results of the walk through are recorded in the operator's log book.



The Liquid Waste Incinerator is equipped with an electronic monitoring and control system. DCS (Digital Control System) is the main control unit. Once per hour, this system performs an internal electronic check on all circuits and alarms any disorders. A Sequential Events Recorder (SER) logs the hourly check. Any process alarm condition in the system including a detected malfunction, is recorded by the SER in the Process Supervisor's office. Pertinent process control parameters are monitored continuously. Values are printed out hourly on a data logger in the control room. Certain parameters are interlocked to shutoff the waste feed to the incinerator when out of specification. This is accomplished by electronically shutting off the waste feed gear pump and valve motor which, because the pump is positive displacement, stops the flow. Thus, malfunctioning equipment which can affect the process are monitored continuously through the process controls. A summary of the procedures used for testing the waste feed cutoff interlock parameters and the testing frequency is provided as Appendix B-III (Liquid Waste Incinerator Monitoring Equipment Calibration and Test Plan).

(3). Non-Routine Inspections

The following inspections are performed on a schedule developed from experience based on the materials of construction and the characteristics of the waste being handled:

- i. Storage tanks for wall thickness on a yearly basis.
- ii. Storage tanks internal visual inspection to check for cracks, corrosion, erosion, and pitting will be scheduled as experience dictates or if the thickness measurements show unusual deterioration. This internal inspection is done every five (5) years.
- iii. Annually, all tank and container containment areas are inspected by an engineer who is qualified to evaluate the condition of the concrete. All exposed surfaces, where possible, are inspected for cracks, failed joint filler or sealant, differential settlement, and any other defects which may decrease the relative impermeability of the containment areas or reduce the effectiveness of collecting spilled waste or storm water. The engineer prepares a detailed report which specifies the nature and content of the inspection, observations made, details of any defects found, evaluate the adequacy of any repairs made during the year, provide details of any remedial action taken (including methods, procedures, and materials specifications) and verify that all repairs made in response to the inspection were made in accordance with the descriptions contained within the report. This report is maintained on file at the facility for a period of three years. This inspection program includes moving the grates from trenches and sumps and inspecting these devices.

- iv. Residue trailers are inspected as outlined in Section B-1.2.7.
- v. Residue trailers are checked externally for leaks, corrosion and safety device problems each time the trailer is loaded. This inspection and any problems found are noted on the Internal Manifest that accompanies each transfer of waste to the Liquid Waste Incinerator from within the plant. Problems noted are corrected.

(4). Liquid Waste Incinerator PM Program

Finally, an extensive preventive maintenance schedule is being followed at the Liquid Waste Incinerator. Process shutdowns are normally taken yearly. Also all major pieces of equipment and major instrumentation loops are checked out thoroughly at least once per year. Some items are normally checked twice per year (i.e. internal combustion chamber, inside quench and stack fan). A copy of the PM schedule is included in Appendix B-IV. This schedule will change as experience dictates.

d. General Safety, Security, Emergency Communication, Fire and Spill Response and Control Equipment Inspection

- (1). Inspection of safety and fire response and control equipment is the primary responsibility of the Niagara Plant Fire Protection Group personnel. These people are specially trained in the inspection and maintenance of this equipment. The attached listing of the "Niagara Plant Fire Protection Group Responsibilities" (Appendix B-V) includes the frequency and type of inspection performed for each type of safety and fire response and control equipment. All fire extinguishers, Purple K Units, foam stations, Scott Air Paks and breathing air units have cards in a card file showing when they were inspected and any problems found. Sprinkler systems, hydrants, fire water diesel pumps and fire hoses have inspection sheets on file showing work performed, hydrotest dates and any problems found that would make them unusable during an emergency. Repairs are also recorded. The Emergency Control Centers are inspected to be sure all emergency report papers and logs are in supply and that the phone system is in working order. It is the responsibility of department personnel to inspect fire extinguishers. In addition, it is the responsibility of each individual to inspect their own personal safety equipment (i.e. respirator, safety glasses, hard hat and shoes) and maintain it in good working condition.
- (2). Plant Security and Emergency Communication Systems are inspected by the guards. Unmanned gates are inspected at least once per shift for integrity by the Guard Sergeant

and the fence lines are done weekly. The plant emergency radio system is the same system used by the Guard Force, thus it is maintained and used daily.

Any problems identified during the inspections are reported immediately to the Main Gate and all inspections are logged in the Plant Protection Daily Report. An example of this report form is attached in Appendix B-VI.

- (3). Spill Response and Control Equipment is maintained in stock at various locations throughout the Niagara Plant. Inventory is checked on a routine basis. Other spill response and control equipment is maintained by our contracted spill response contractor as stated in the "Niagara Plant Spill Control & Contingency Response Plan" (Appendix G-III).

#### **B-1.2.4 Tank Inspections**

Tank integrity is maintained through a formal inspection program. These inspections are performed by a corrosion specialist or qualified individual. The job description for the Inspector is included in Appendix C-IV. Practices such as those listed in the National Association of Corrosion Engineers (NACE), the American Petroleum Institute, ASME, and Pfaudler are followed based on the conditions that exist. The following describe types of inspections.

a. Glass Lined Tank - Internal Inspection

Glass-lined tank inspections are performed according to the procedures recommended by the Pfaudler Company, who is the manufacturer of this type of tank. The inspection involves a visual check of the entire glass surface and an electrical test if warranted. The electrical test involves using a Pfaudlertron® to develop a high voltage potential across the tank shell and the glass surface such that a visible and audible spark occurs in the probe tip when it passes over a defect in the glass surface. A copy of the Pfaudler Manual, which includes detail procedures for conducting the test, is available for review in the maintenance department office.

b. Carbon Steel - Unlined Internal Inspection

The vessel and welds are checked for the following:

- Pitting
- Line corrosion
- General corrosion

- Grooving
- Blistering
- Cuts or gouges
- Metal thickness using ultrasonic testing
- Other forms of deterioration such as graphitization, high temperature hydrogen attack embrittlement, and corrosion at welds
- All surfaces will be thoroughly inspected.

The inspection is done by direct visual examination using sufficient illumination via flashlight or auxiliary lighting. A magnifying lens may be used to assist examination.

In some cases remote visual examinations may be conducted by using mirrors, telescopes, borescopes, fiber optics, cameras or other suitable instruments. Such systems shall have a resolution capability at least equivalent to that obtainable by direct visual observation. Examples of inspection equipment are identified in the following subsection (e).

Translucent visual examination may also be used. Translucent visual examination is a supplement to direct visual examination. The method of translucent visual examination uses the aid of artificial lighting which can be contained in an illuminator that produces directional lighting. The illuminator provides light of an intensity that illuminates and diffuses the light evenly through the area or region under examination. The ambient lighting is arranged that there are no surface glares or reflections from the surface under examination and is less than the light applied through the area or region under examination. The artificial light source was sufficient intensity to permit "candling" of any translucent laminate thickness variations.

This procedure covers the examination of the shell/heads, nozzle and welds. The pattern for thickness measurements is based on conditions encountered. When signs of wear or corrosion are observed, the inspector expands the area of inspection to observe all potentially effected areas.

c. Lined Tanks Other Than Glass - Internal Inspection

For tanks with synthetic linings, a thorough visual inspection is made of the liner as well as measuring thickness of the tank by ultrasounds. This inspection includes the shell/heads and nozzles. The pattern is dependent on conditions encountered. All surfaces are, however, thoroughly inspected.

d. External Tank Inspection

This procedure requires the tank shell and heads be accessible (not jacketed, insulated or otherwise covered). An external tank inspection is done by direct visual examination using sufficient illumination via flashlight or auxiliary lighting.

The vessel is examined for the following: corrosion, stress, mechanical damage, flaws and metal thickness (checked by ultrasonic testing). Metal thickness shall be obtained at sufficient locations (top head, bottom head, and tank wall) to determine the integrity of the vessel. The pattern is based upon conditions encountered and expanded in areas where corrosion or signs of wear are encountered.

e) Inspection Equipment

Examples of equipment used to perform tank inspections include:

- (1). Olympus Optical Company Industrial Fiberscope, Model IF6D3/IFIID3. Used to conduct penetrant or magnetic testing to detect minute surface flaws. Can be used from a remote location.
- (2). Krautkramer Branson Company Ultrasonic Thickness Gage, Model CL202F (for fiberglass) and Model DM2 (for metals).

Other equipment may be used for specific applications, or when new technology instruments become available which improve the quality of the inspections.

f. Frequency of Inspection

The minimum frequency for inspection is as follows:

- (1). External thickness measurements every year
- (2). Internal inspections for corrosion, etc. every five (5) years.

The frequency may be increased for internal inspections based on the demonstrated

condition. These criteria will be primarily the condition of the tank and thickness measurements. The following expression will be used:

$$\text{Time until next test} = \frac{(\text{actual thickness} - \text{minimum thickness})}{2 (\text{corrosion rate})}$$

All surfaces will be inspected. When performing tank thickness determinations, normally eight (8) points are tested; four (4) along the side shell and two (2) each on each head, all evenly spaced. In addition, at least one (1) point must be taken on the tank shell/head as close as possible to each discharge nozzle.

Examples of the report forms used for the above inspections are included in Appendix B-I.

#### **B-1.2.5 Respirator Inspection**

a. Half Face/Escapes and Full Face/Canister Respirators

Respirators which are a half face or the escape type carried by all employees are good for a period of one (1) year. Once the seals are broken a label is placed on the canister. If breakthrough is noted before the one (1) year time frame the canisters are changed and labeled. Each individual is responsible for the maintenance and upkeep of his/her own personal respirator.

b. Full Face/Breathing Air

Those units are self contained breathing air. The units are inspected on a monthly basis and noted inside the breathing air container.

#### **B-1.2.6 Communication System**

The communication system is tested as follows:

Emergency Warning Tone System

Once per week.

Telephones

Normal phones used on a daily basis by plant personnel.

### Loudspeakers

Used on a regular basis to communicate normal messages in the plant. They are tested at the same frequency as the emergency warning system signals.

### 2 Way Radio System

Used on a daily basis for plant communications. Key personnel also carry pagers.

## **B-1.2.7 Waste Trailer Inspections**

### a. Department of Transportation (DOT) Guidelines

Department of Transportation (DOT) guidelines established in 49 CFR 180.407 are followed for the Trailer Inspection Program. Example forms used for these inspections are included in Appendix B-I. The inspections required by DOT include:

#### 1. Loading Inspection

A safety check is made during loading and unloading operations. Any defective equipment is noted on Internal Manifest ticket as shown on the example form included in Appendix B-I.

#### 2. Thickness Check

The shell and head thickness of all unlined cargo tanks is measured every two (2) years.

#### 3. Internal Inspection

An internal visual inspection is conducted on a yearly basis.

#### 4. External Inspection

An external visual inspection will be conducted every year. This inspection will include, at a minimum, all of the requirements listed in the above regulation.

#### 5. Pressure Check

A pressure check is conducted every five (5) years. Each cargo tank is hydrostatically tested to a minimum internal pressure of 1.5 times the design pressure.

#### 6. Leak Check

Each cargo tank is leak tested every year. The tanks are tested at a minimum of eighty percent (80%) of the tank design pressure.



7. Lining Inspection

The integrity of the lining on all lined cargo tanks is verified on a yearly basis.

8. NYSDOT Vehicle Inspection

Per New York regulations, the vehicles are inspected every year.

The results of inspections 2 through 7 are reported on the "Tanker Test and Inspection Report" form which is also included in Appendix B-I.

b. Subpart CC Inspection Requirements

Under Subpart CC (40 CFR 264), OCC is required to control air emissions from the tank trailers. Air emissions are controlled by using tank systems that are of vapor-tight construction, which is confirmed by routine inspection and testing. A safety check is performed during each unloading/loading operation and the findings are recorded on the Internal Manifest (Appendix B-1). The trailers are visually inspected for leaks and corrosion as part of the weekly container storage pad inspections. The trailers are leak tested either annually according to EPA Method 27 (Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure-Vacuum Test), or semi-annually according to EPA Method 21 (Determination of Volatile Organic Compound Leaks), which is considered equivalent to Method 27 or they are tested per DOT 49 CFR 180.407 requirements which have been described in items 1-7 on pages B-21, B-22. Additional information on the inspection and test procedures is included in the Inspection and Monitoring Test Plan for Air Emissions from Tanks and Containers (Appendix B-VIII).

B-1.2.8 Portable Containers

Portable containers are visually checked during each loading/unloading for signs of deterioration and physical condition in accordance with the safety check shown on the Internal H W Manifest (Appendix B-I). The safety check includes inspection of the physical and operating condition of all valves, access ports, pressure gauges, rupture discs, and vents. For control of air emissions, the portable tanks are tested semiannually according to EPA Method 21, when available in service with hazardous waste containing greater than 100 ppmw volatile organics. Additional information on inspection and test procedures is included in the Inspection and Monitoring Test Plan for Air Emissions from Tanks and Containers (Appendix B-VIII).



#### **B-1.2.9 Leak Detection and Repair Plan (LDAR)**

OCC has established an effective inspection and testing procedure for monitoring fugitive emissions. A Leak Detection and Repair (LDAR) Plan has been implemented to comply with 40 CFR Part 264 Subpart BB - Air Emissions upon permit reissuance. A copy of the Plan is included as Appendix B-VII. The Plan includes checks for leaks around flanges, threaded connections, unions, hose connections, sample points, and pump seals in the system, which contain or contact a hazardous waste stream having organic concentrations of at least ten percent (10%).

The enclosed Plan is considered an example because it will be necessary from time to time to update certain information such as changes in process equipment, monitoring instruments manufacturer, or the regulatory standards. A current copy of the LDAR Plan is available for review and inspection in the Environmental Control Department.

All tanks used to store hazardous waste are listed in Appendix E-I (Attachment E). OCC has identified all affected equipment that contain or contact hazardous waste streams. Each valve, flange, sample point, hose coupling, and pump is identified on an RCRA Equipment List. An example of a typical list that is maintained at the facility is included in Appendix B-VII. The equipment is monitored with a portable VOC analyzer that meets the performance criteria of EPA Method 21.

**SECTION B-2**

**TRAFFIC PATTERNS**